



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/016,544

12/11/2001

Ronald Wayne Ausen

55947US002

7670

32692

7590

05/18/2004

3M INNOVATIVE PROPERTIES COMPANY
PO BOX 33427
ST. PAUL, MN 55133-3427

EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,544

Applicant(s)

AUSEN ET AL.

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 2,4-17,36-51,55,57 and 59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,18-35,52-54,56 and 58 is/are rejected.
- 7) ☒ Claim(s) 3,21,22 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 and 3</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1733

DETAILED ACTION

1. Applicant is advised that should claim 53 be found allowable, claim 58 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Election/Restrictions

2. Applicant's election without traverse of a method in which the separable surface elements are formed by at least partially cutting the film in Paper No. 03092004 is acknowledged.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 52-54, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Calhoun (US 5,240,761). Calhoun discloses a method of forming a film structure or adhesive tape comprising the steps of applying a layer of adhesive or operating agent to a base sheet, applying a layer of particles, which define the top portion of the film

structure, to the adhesive coated sheet, and biaxially stretching the assembly to separate the particles from one another, wherein the adhesive is exposed (to a greater degree) due to the particle separation during stretching (Column 2, Line 64 – Column 3, Line 6). In describing the particles, Calhoun states that the particles themselves do not have to be electrically conductive- they can in fact be non-conductive particles, such as ceramic particles (Column 5, Lines 48-56).

Regarding claims 1, 52-54, and 58, the adhesive tape of Calhoun can be permanently adhered to a flexible web, which is analogous to the claimed "surface of a substrate". In this instance, pressure would be applied during the bonding of the respective components.

5. Claims 18-20, 23, 26, 27, 31, 33-35, 52, 54, and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Ang (US 4,537,809). Ang is directed to a method of producing an adhesive laminate comprising the steps of applying a layer of adhesive 16 to a base web 18, and applying a backing layer 14 to the adhesive coated base web, wherein the top of portion of the backing layer defines the top portion of the adhesive laminate (film structure). At this point, the top portion or backing layer is scored or cut using a knife or laser and the laminate is flexed or stretched in order to rupture the backing layer in the vicinity of the score lines (Column 2, Lines 30-50). As depicted in Figures 2 and 3, the adhesive becomes exposed after the laminate is flexed or stretched. It is noted that the bending or flexing is seen to constitute a stretching step in that the scored lines are tensioned and thus weakened, leading to their rupturing (Column 10, Lines 50-56).

As to claims 26 and 56, Ang states that the depth of the scored segment can be equal to or slightly greater than the thickness of the top portion or backing sheet (Column5, Lines 19-25).

Regarding claim 27, as best depicted in Figures 1 and 3, the cutting is included in more than one direction (machine direction and direction that is perpendicular to machine direction).

With respect to claim 31, the film structure or adhesive laminate of Ang comprises a base web, an adhesive layer, and a backing sheet- this assembly is seen to constitute a multi-layer structure.

As to claims 33 and 34, the bending or stretching of Ang is seen to constitute a simultaneous biaxial stretching step.

Regarding claim 35, the bending or flexing of Ang is inelastic in that the stretched components do not return to their original shape (scored regions are ruptured and removed).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ang and further in view of Duncan (US 4,626,460). As noted in the previous

Art Unit: 1733

paragraph, Ang discloses a method of forming an adhesive laminate comprising a base web 18, a pressure adhesive layer 16, and a backing 14, wherein said backing can be formed of a fibrous material or a polymer film (Column 3, Line 42 – Column 4, Line 4). Ang further notes that the adhesive laminate has a plurality of uses, such as label stock, decorative adhesive sheeting, and adhesive tapes. In this instance, though, Ang is completely silent as to how the individual layers are formed into the laminate. One of ordinary skill in the art at the time of the invention would have found it obvious to coextrude the layers since this technique is extremely well known and extensively used in the manufacture of similar adhesive laminates, as shown for example by Duncan (Column 1, Lines 35-61). This method provides the advantage of reducing the number of manufacturing steps (only a single coextrusion step required). It is noted that the adhesive laminate of Duncan, in an analogous manner to Ang, has a use as a label stock product and furthermore, the backing layer or release layer of Duncan is similarly formed of a peelable or removable, polymer film. Lastly, the backing layer of Ang is seen to constitute the "masking layer" of the claimed invention.

8. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ang. Ang is directed to a method of producing an adhesive laminate comprising the steps of applying a layer of adhesive 16 to a base web 18, and applying a backing layer 14 to the adhesive coated base web, wherein the top of portion of the backing layer defines the top portion of the adhesive laminate (film structure). In this instance, a plurality of scores or cuts having a depth equal to or slightly greater than the thickness of the backing layer are provided. The regions or gaps between the scores are

Art Unit: 1733

analogous to the "separable surface elements" of the claimed invention. Ang suggests that ordinarily the number of gaps is between 5 and 25 per inch (Column 9, Lines 25-31). While Ang fails to expressly suggest the claimed values for the density of the surface elements, one of ordinary skill in the art at the time of the invention would have found it obvious to include any number of separable surface elements depending on the specific product being manufactured. It is emphasized that the technique of providing cuts in a backing layer and subsequently stretching the laminate to expose the adhesive layer is expressly suggested by Ang- one of ordinary skill in the art would have been able to appropriately select the number of cuts and thus the number of separable surface elements absent any conclusive showing of unexpected results.

Allowable Subject Matter

9. Claims 3, 21, 22, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As noted above, Calhoun and Ang are directed to distinct methods in which an adhesive laminate is stretched to exposed an underlying adhesive layer. In particular, Ang suggests that the underlying adhesive is exposed as a result of bending or stretching an adhesive laminate that contains scores or cuts in an analogous manner to the claimed invention. In this instance, though, the top layer or backing film (in which the cuts are provided through) is a removable layer and thus is not applied to the surface of an additional substrate as required by the claimed invention. As defined by the claimed invention, "the first major surface of the film structure" is applied to the surface of a substrate after stretching,

wherein the first major surface is defined as the top portion of the film structure (analogous to the backing layer of Ang). While the method of Calhoun involves the application of the first major surface against an additional substrate, this method contains a plurality of particles that define the top portion and as such, the method does not contain a cutting step nor would one of ordinary skill in the art at the time of the invention be motivated to include a cutting step.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berry (US 4,414,970) is directed to a method of forming an elastic bandage, wherein said bandage comprises a central, elastomeric film and a pair of net-like layers bonded to each side of said central film via a pressure sensitive adhesive. The elastic bandage is described as being adhesive after stretching due to the increased exposure of the adhesive through the net-like layers.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

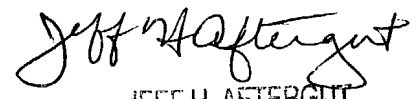
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1733

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Justin Fischer

May 12, 2004


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300